

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

, ,

APPLICANT

Dimitri Gorokhovik

SERIAL NO.

10/084,721

EXAMINER

: A. A. Caschera

FILED

February 25, 2004

ART UNIT

: 2676

FOR

METHOD OF CONTROLLING THE DISPLAY OF A CHARACTER

BASED ON A DYNAMIC CODE GENERATION

APPEAL BRIEF TRANSMITTAL LETTER

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA. 22313-1450

Dear Sir:

Appellants respectfully submit three copies of a Brief For Appellants that includes an Appendix with the pending claims. The Appeal Brief is now due on October 4, 2004.

Appellants enclose a check in the amount of \$340.00 covering the requisite Government Fee.

Should the Examiner deem that there are any issues which may be best resolved by telephone communication, kindly telephone Applicants undersigned representative at the number listed below.

Respectfully submitted,

Russell Gross

Registration No. 40,007

By: Steve Cha

Attorney for Applicant

Registration No. 44,069

Date:

Mail all correspondence to:

Russell Gross, Registration No. 40,007 US PHILIPS CORPORATION

P.O. Box 3001

Briarcliff Manor, NY 10510-8001

Phone: (914) 333-9608 Fax: (914) 332-0615

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Steve Cha, Reg. No. 44,069 (Name of Registered Rep.)

(Signature and Date)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re the Application

Inventor

Dimitra Gorokhovik :

Application No.

10/084,721

:

Filed

February 25, 2002

For

Method of Controlling the Display of a Character

Based On a Dynamic Code Generation

APPEAL BRIEF

On Appeal from Group Art Unit 2676

Russell Gross Registration No. 40,007 By: Steve Cha **Attorney for Applicant**

US PHILIPS CORPORATION

580 White Plains Road Tarrytown, NY 10591 Phone: (914) 333-9609

Fax: (914) 332-0615

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the present application, U.S. Philips Corporation, and not the party named in the above caption.

II. RELATED APPEALS AND INTERFERENCES

With regard to identifying by number and filing date all other appeals or interferences known to Appellant which will directly effect or be directly affected by or have a bearing on the Board's decision in this appeal, Appellant is not aware of any such appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-8 have been presented for examination. All of these claims are pending, stand finally rejected, and form the subject matter of the present appeal.

IV. STATUS OF AMENDMENTS

The Amendments made to the claims in response to an Office Action, dated December 8, 2003, were entered. No Amendments were made to the claims in response to an Office Action dated May 11, 2004.

V. SUMMARY OF THE INVENTION

The claimed invention is a method, device and computer program product that controls the display of a character based on a dynamic code generation. The method for controlling the character display, as recited in claim 1, includes a summary description (DES) of a character included in a database, and the generation of an executable code (BIN) from the summary description (DES) and the execution of the executable code (BIN) corresponding to the character so as to display the character on the output apparatus, wherein generating the executable code comprises two substeps: a step of extracting, from the summary description (DES) of said character, a nonexecutable symbolic code (SYM) defining actions for coloring in points on the output apparatus and a step of dynamic generation, from the symbolic code (SYM), of the executable code.

The device, as recited in claim 4, for controlling the display of at least one character has access to a database containing a summary description (DES) of the character and further includes a generation module, related to the database, that is intended to generate executable code (BIN) from the summary description of said character, an execution module, coupled to the storage apparatus and to the output apparatus, the execution module intended to execute the executable code (BIN) corresponding to the character so as to display the character on the output apparatus, wherein the generation module further includes means of extracting, from the summary description (DES) of said character, a nonexecutable symbolic code (SYM) defining the actions for coloring-in points on the output apparatus and means of dynamic generation, display of at least one character on an output apparatus intended to display, provides from the symbolic code, (SYM) of the executable code (BIN).

access to a database containing a summary description (DES) of the character and computer instructions the generation of an executable code from the summary description (DES) and the execution of the executable code (BIN) corresponding to the character so as to display the character on the output apparatus, wherein generating the executable code comprises two substeps: extracting, from the summary description (DES) of the character, a nonexecutable symbolic code (SYM) defining actions for coloring in points on the output apparatus and a step of dynamic generation, from the symbolic code (SYM), of the executable code.

VI. ISSUES

Whether:

- 1. claims 1, 2, 4, 5, 7, and 8 stand correctly rejected under 35 U.S.C. § 103(a) as unpatentable over Guha. (U.S.P No. 6,005,588); and
- 2. claims 3 and 6 stand correctly rejected under 35 U.S.C.§ 103(a) over Guha in view of Colletti (U.S.P. No. 5,990,907).

VII. GROUPING OF CLAIMS

Claims 1-8 stand or fall together.

VIII. ARGUMENT

1. 35 USC §103 Rejection of claims 1, 2, 4, 5, 7 and 8

The rejection of claims 1, 2, 4, 5, 7 and 8 is in error because the reference fails to show a limitation cited in the independent claims 1, 4, 7 and 8. Claims 2 and 5 depend from claims 1 and 4, respectively.

The invention recited in instant claim 1, which is typical of the subject matter recited in each independent claim, claims the generation of an executable code (BIN) from a summary description (DES) of characters that are stored in a database and the execution of the executable code (BIN) corresponding to the character so as to display the character on the output apparatus, wherein generating the executable code comprises two substeps: a step of extracting, from the summary description (DES) of the character, a nonexecutable symbolic code (SYM) defining actions for coloring in points on the output apparatus and a step of dynamic generation, from the symbolic code (SYM), of the executable code.

In contrast, Guha teaches a system and method for displaying text data in a graphical user interface that includes a two-step process. The first step is an initialization phase wherein characters in a character set are provided to a Renderer (203) which generates bitmap representations of the provided characters. The bitmap representation is stored in a frame buffer (106). The bitmap representation is then used as a template to generate executable code that is subsequently stored. The second step is to use the stored generated executable code for formulation of the character on a display screen. Guha, thus, teaches the pre-formation of executable code(s) for each character in a character set(s) and then the use of the executed codes to generate any character in any provided character set. (See, col. 4, lines 29-32, which state, "[o]nce initialization module 202 has completed its operations, real-time use of system 100 may commence using display module 209 in order to achieve the high-speed display of text on display screen 105.").

Guha, further, teaches that the executable code is stored. (see col. 4, lines 61-67, which state in part, [e]xecutable character generation code 208 is stored in RAM 102 or in disk drive 103 for later use by display module 209.").

In the Final Office Action, dated May 11, 2004, the examiner rejected the claims 1, 2, 4, 5, 7 and 8 in view of Guha, because Guha, allegedly, discloses the subject matter recited therein but "does not explicitly disclose storing the character sets in a database... One of ordinary skill in the art, ... would have expected Applicant's invention to perform equally well with the inherently taught feature of storing character sets in a random-access memory." (See page 3, FOA, May 11, 2004).

The applicant respectfully submits that Guha does not disclose, suggest or motivate an artisan to develop the novel features of the present invention because Guha does not disclose the elements of the invention, and Guha further, specifically teaches away from the feature that the examiner believes is "inherent" and renders the invention obvious. In supporting the rejection of the claims, the examiner has interpreted or drawn analogies between subject matter recited in the claims and elements taught by Guha. More specifically, the examiner states that "the character sets of Guha [are] equivalent to the summary description of applicant's claims," "the character bitmaps [are] functionally equivalent to the nonexecutable symbolic code," and "the process of scanning ... [is] functionally equivalents to performing a dynamic generation step." Although, applicant disagrees with the examiner's interpretation of the terms between the instant application and the cited reference, applicant will use the terms interchangeable, herein, in order distinguish the subject matter claimed from the elements in reference cited.

With regard to independent claim 1, which is typical of the remaining independent claims, this claim is distinguished over the reference cited by virtue of the step of "extracting, from the summary description of said character, a nonexecutable symbolic code defining actions for coloring in points."

More specifically, Guha teaches that a bitmap (symbolic code) is generated from information representative of a character in the character set. (See col. 5, line 36, which states"[r]enderer 203 forms bitmap 402"). Further, the generated bitmap is stored in a temporary area for subsequent processing. (See, col. 5, lines 24-25, which state, "[r]ender 203 prints, or 'renders' 302 the character set to some area of memory such as frame buffer 106."). The temporary nature of the frame buffer is clearly expressed by Guha in col. 3, line 67 - col. 4, line 3, which state "frame buffer 106 is an area of memory that may be used as a workspace and is <u>also</u> used for drawing output prior to its display by display screen 105." (emphasis added).

Hence, Guha teaches that the bitmap is generated from the, unstored, character set and the bitmap is then stored in a re-useable, temporary, area for subsequent processing. Guha fails to teach extracting the bitmap (symbolic code) from the character set (summary description) because the bitmap is not stored in the summary description.

In fact, Guha specifically teaches away from storing either the bitmap or the character set as this would increase storage requirements and utilize resources. (See, for example, col. 1, lines 25-41, which state in part, "[t]here are many well-known techniques for displaying text on a screen. One such technique involves storage of a bitmap for each character in a character set... A disadvantage of such a technique is that it requires storing and loading a distinct set of bitmaps for each font, which consumes

system resources and can slow down the display. ... Display may be even slower if bitmaps must be individually loaded from data storage as needed.").

One would not look to Guha to store bitmaps or character sets because such storage is a disadvantage that the Guha seeks to overcome. Thus, the feature of storing the character sets cannot be considered an inherent feature or a design consideration, as suggested by the examiner, because Guha specifically discusses the disadvantages of storing the bitmaps or the character sets.

Although, applicant has used the terms bitmap and symbolic code interchangeably to illustrate comparable steps, applicant further disagrees with the examiner's interpretation. Guha, describes the bitmap as including "a grid of pixels 403, some of which are activated as indicated by 404 to form an approximation of the shape of character 401." (See col. 5, lines 36-40). Such a representation of a bitmap is well-know art and is essentially a passive representation of the associated character.

The symbolic code of the instant invention, on the other hand, is non-executable code that provides instruction for generating the executable code. In one embodiment, shown in Figure 2a, and described on page 7 of the instant application, the symbolic code is represented in a tree-like structure. In another embodiment, the symbolic code may be a code sequence. (See page 8 of the instant application, line17).

The symbolic code of the instant invention can not be interpreted to be same as the Guha bitmap because program instructions are executed on the bitmap to determine the resultant executable code, whereas the symbolic code provides instruction for determining the executable code. Applicant submits that the examiner's interpretation of the bitmap as the functionally equivalent of the symbolic code is not correct as the bitmap

does not provide instruction for determining the executable code.

It is respectfully submitted that it was held by *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) that in order to establish a *prima facie* case of obviousness, three basic criteria must be met;

- 1. there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings;
- 2. there must be a reasonable expectation of success; and
- 3. the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

With regard to the invention as recited in claim 1, Applicant respectfully submits that none of the three basic criteria have been met, thus a *prima facie* case of obviousness has not been set forth.

Furthermore, Applicant respectfully submits that Manual of Patent Examining Procedure (MPEP), Eight Edition, Rev. 2, May 2004, also provides another appropriate instruction by which the instant Appeal should be judged. MPEP §2143.01 provides in the subsections entitled:

Fact That The Claimed Invention Is Within The Capabilities Of One Of Ordinary Skill In The Art Is Not Sufficient By Itself To Establish *PRIMA FACIE* Obviousness.

"A statement that modification of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references." *Ex parte*

Levengood 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP §2143.01, p. 2100-131.

The Proposed Modification Cannot Change The Principle Of Operation Of A Reference.

"If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima* facie obvious" (In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)). MPEP §2143.01, p. 2100-132.

As stated previously, Guha describes the disadvantages of storing the bitmaps. Hence, the inherent feature of storing the character sets, which the examiner suggest would be within the skill of the art, would change the principle of operation of Guha. For these reasons, also, applicant respectfully submits that a *prima facie* case of obviousness has not been set forth.

With regard to independent claims 4, 7 and 8, these claims were rejected for the same reason stated in rejected claim 1. Claims 4, 7 and 8 include subject matter similar to that recited in claim 1. Hence, for the remarks made with regard to claim 1, which are repeated in overcoming the rejection of claims 4, 7 and 8, Applicant respectfully submits that a *prima facie* case of obviousness has not been set forth.

With regard to dependent claims 2 and 5, these claims depend from claims 1 and 4, respectively. Applicant respectfully submits that these claims are allowable at least for their dependence upon allowable base claims, without even contemplating the merits of the dependent claims, as it was held by *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) that if an independent claim is non-obvious under 35 U.S.C.§103(a), then any claim depending therefrom is non-obvious.

2. 35 USC §103 Rejection of claims 3 and 6

The rejections of claims 3 and 6 are in error because the references fail to show a limitation cited in the independent claims 1 and 4, from which they depend.

With regard to dependent claims 3 and 6, these claims depend from claims 1 and 4, respectively. Applicant respectfully submits that these claims are allowable at least for their dependence upon allowable base claims, without even contemplating the merits of the dependent claims, as it was held by *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) that if an independent claim is non-obvious under 35 U.S.C.§103(a), then any claim depending therefrom is non-obvious.

IX. CONCLUSION

In view of the law and facts stated herein, it is respectfully submitted that the referenced teachings fail suggest the claimed invention and the burden of showing that Guha discloses all of the features, expressly or inherently, recited in the claims has not been met. In particular, Guha neither explicitly nor impliedly teaches "summary description of said character stored in a data base" or "extracting from the summary description of said character, a nonexecutable symbolic code defining actions for coloring in points on the output apparatus", as is recited in the independent claims 1, 4, 7 and 8. Nothing found in Guha teaches or suggest these features and Colletti fails to provide such teachings.

In view of the above analysis, it is respectfully submitted that the referenced teachings fail to render obvious the subject matter of any of the present claims. It is respectfully requested that this Honorable Board reverse all grounds of rejection stated in the Final Office Action.

Respectfully submitted,

Russell Gross

PTO Registration No. 40,007

By: Steve Cha

Attorney for Applicant Registration No. 44,780

(Signature)

CERTIFICATE OF MAILING UNDER 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Mail Stop Appeal Commissioner for Patents, P.O. Box 1450

Alexandria, Va 22313-1450 on October 1, 2004

Steve Cha, Reg. No. 44,069

Date: October 1, 2004

(Name of Registered Representative)

X. <u>APPENDIX: THE CLAIMS ON APPEAL</u>

1. A method intended for controlling the display of at least one character on an output apparatus, a summary description of said character being included in a database, said method comprising the following steps:

generation of an executable code from the summary description of said character,

execution of the executable code corresponding to said character so as to display the character on the output apparatus,

characterized in that the step of generating the executable code comprises two substeps:

a step of extracting, from the summary description of said character, a nonexecutable symbolic code defining actions for coloring in points on the output apparatus,

a step of dynamic generation, from said symbolic code, of the executable code.

- 2. A method as claimed in claim 1, characterized in that the executable generated code is stored in a storage module.
- 3. The method as claimed in claim 2, which method comprises the following steps: reception of a request to display said character, search for an executable code corresponding to said character in the

search for an executable code corresponding to said character in the storage module,

decision, depending on the result of the search, to:

when the executable code corresponding to said character is absent from the storage module, generate this code from the summary description of said character, store it in the storage module and execute it so as to display said character on the output apparatus,

when the executable code corresponding to said character is present in the storage module, execute it so as to display said character on the output apparatus.

4. A device intended for controlling the display of at least one character on an output apparatus, a summary description of said character being included in a database accessible to the device, including:

a generation module related to the database and intended to generate an executable code from the summary description of said character,

an execution module, coupled to the storage apparatus and to the output apparatus, said execution module being intended to execute the executable code corresponding to said character so as to display said character on the output apparatus, characterized in that the generation module includes:

means of extracting, from the summary description of said character, a nonexecutable symbolic code defining actions for coloring in points on the output apparatus,

means of dynamic generation, from said symbolic code, of the executable code.

- 5. A device as claimed in claim 4, in which the device comprises a storage module coupled to the generation module and intended to store the generated executable code.
- 6. A device as claimed in claim 5, which device comprises:

means of reception of a request to display said character,

means of searching for an executable code corresponding to said character in the storage module,

means of decision, depending on the result of the search for the executable code corresponding to said character, for:

when the executable code corresponding to said character is absent from the storage module, generating this code from the summary description of said character, storing it in the storage module and executing it so as to display said character on the output apparatus,

when the executable code corresponding to said character is present in the storage module, executing it so as to display said character on the output apparatus.

7. An electronic apparatus comprising at least:

means of access to a database containing summary descriptions of characters,

a device intended for controlling the display of at least one character on an output apparatus as claimed in claim 4, said database being accessible to said device, an output apparatus intended to display at least one character and controlled by the control device.

8. A computer program product for controlling the display of at least one character on an output apparatus intended to display, a summary description of said character being included in a database accessible to the computer, comprising at least a number of instructions necessary for carrying out the steps of the methods described in claim 1.